## §73.213

(b) Antenna heights above average terrain will be rounded out to the nearest meter

[28 FR 13623, Dec. 14, 1963, as amended at 48 FR 29506, June 27, 1983]

## § 73.213 Grandfathered short-spaced stations.

(a) Stations at locations authorized prior to November 16, 1964, that did not meet the separation distances required by §73.207 and have remained continuously short-spaced since that time may be modified or relocated with respect to such short-spaced stations, provided that (i) any area predicted to receive interference lies completely within any area currently predicted to receive cochannel or first-adjacent channel interference as calculated in accordance with paragraph (a)(1) of this section, or that (ii) a showing is provided pursuant to paragraph (a)(2) of this section that demonstrates that the public interest would be served by the proposed changes.

(1) The F(50,50) curves in Figure 1 of §73.333 are to be used in conjunction with the proposed effective radiated power and antenna height above average terrain, as calculated pursuant to §73.313(c), (d)(2) and (d)(3), using data for as many radials as necessary, to determine the location of the desired (service) field strength. The F(50,10) curves in Figure 1a of §73.333 are to be used in conjunction with the proposed effective radiated power and antenna height above average terrain, as calculated pursuant to §73.313(c), (d)(2) and (d)(3), using data for as many radials as necessary, to determine the location of the undesired (interfering) field strength. Predicted interference is defined to exist only for locations where the desired (service) field strength exceeds 0.5 mV/m (54 dBu) for a Class B station, 0.7 mV/m (57 dBu) for a Class B1 station, and 1 mV/m (60 dBu) for any other class of station.

(i) Co-channel interference is predicted to exist, for the purpose of this section, at all locations where the undesired (interfering station) F(50,10) field strength exceeds a value 20 dB below the desired (service) F(50,50) field strength of the station being considered (e.g., where the protected field strength is 60 dBu, the interfering field

strength must be 40 dBu or more for predicted interference to exist).

- (ii) First-adjacent channel interference is predicted to exist, for the purpose of this section, at all locations where the undesired (interfering station) F(50,10) field strength exceeds a value 6 dB below the desired (service) F(50,50) field strength of the station being considered (e.g., where the protected field strength is 60 dBu, the interfering field strength must be 54 dBu or more for predicted interference to exist).
- (2) For co-channel and first-adjacent channel stations, a showing that the public interest would be served by the changes proposed in an application must include exhibits demonstrating that the total area and population subject to co-channel or first-adjacent channel interference, caused and received, would be maintained or decreased. In addition, the showing must include exhibits demonstrating that the area and the population subject to co-channel or first-adjacent channel interference caused by the proposed facility to each short-spaced station individually is not increased. In all cases, the applicant must also show that any area predicted to lose service as a result of new co-channel or first-adjacent-channel interference has adequate aural service remaining. For the purpose of this section, adequate service is defined as 5 or more aural services (AM
- (3) For co-channel and first-adjacentchannel stations, a copy of any application proposing interference caused in any areas where interference is not currently caused must be served upon the licensee(s) of the affected shortspaced station(s).
- (4) For stations covered by this paragraph (a), there are no distance separation or interference protection requirements with respect to second-adjacent and third-adjacent channel short-spacings that have existed continuously since November 16, 1964.
- (b) Stations at locations authorized prior to May 17, 1989, that did not meet the IF separation distances required by §73.207 and have remained short-spaced since that time may be modified or relocated provided that the overlap area

of the two stations' 36 mV/m field strength contours is not increased.

(c) Short spacings involving at least one Class A allotment or authorization. Stations that became short spaced on or after November 16, 1964 (including stations that do not meet the minimum distance separation requirements of paragraph (c)(1) of this section and that propose to maintain or increase their existing distance separations) may be modified or relocated in accordance with paragraph (c)(1) or (c)(2) of this section, except that this provision does not apply to stations that became short spaced by grant of applications filed after October 1, 1989, or filed pursuant to §73.215. If the reference coordinates of an allotment are short spaced to an authorized facility or another allotment (as a result of the revision of §73.207 in the Second Report and Order in MM Docket No. 88-375), an application for the allotment may be authorized, and subsequently modified after grant, in accordance with paragraph (c)(1) or (c)(2) of this section only with respect to such short spacing. No other stations will be authorized pursuant to these paragraphs.

(1) Applications for authorization under requirements equivalent to those of prior

rules. Each application for authority to operate a Class A station with no more than 3000 watts ERP and 100 meters antenna HAAT (or equivalent lower ERP and higher antenna HAAT based on a class contour distance of 24 km) must specify a transmitter site that meets the minimum distance separation requirements in this paragraph. Each application for authority to operate a Class A station with more than 3000 watts ERP (up to a maximum of 5800 watts), but with an antenna HAAT lower than 100 meters such that the distance to the predicted 0.05 mV/m (34 dBμ V/m) F(50,10) field strength contour does not exceed 98 km must specify a transmitter site that meets the minimum distance separation requirements in this paragraph. Each application for authority to operate an FM station of any class other than Class A must specify a transmitter site that meets the minimum distanceseparation requirements in this paragraph with respect to Class A stations operating pursuant to this paragraph or paragraph (c)(2) of this section, and that meets the minimum distance separation requirements of §73.207 with respect to all other stations.

MINIMUM DISTANCE SEPARATION REQUIREMENTS IN KILOMETERS (MILES)

Relation	Co-channel	200 kHz	400/600 kHz	10.6/10.8 MHz
A to A	105 (65)	64 (40)	27 (17)	8 (5)
A to B1	138 (86)	88 (55)	48 (30)	11 (6)
A to B	163 (101)	105 (65)	69 (43)	14 (9)
A to C3	138 (86)	84 (52)	42 (26)	11 (6)
A to C2	163 (101)	105 (65)	55 (34)	14 (9)
A to C1	196 (122)	129 (80)	74 (46)	21 (13)
A to C	222 (138)	161 (100)	94 (58)	28 (17)

(2) Applications for authorization of Class A facilities greater than 3,000 watts ERP and 100 meters HAAT. Each application to operate a Class A station with an ERP and HAAT such that the reference distance would exceed 24 kilometers must contain an exhibit demonstrating the consent of the licensee of each co-channel, first, second or third adjacent channel station (for which the requirements of §73.207 are not met) to a grant of that application. Each such application must specify a transmitter site that meets the applicable IF-related channel distance sepa-

ration requirements of §73.207. Applications that specify a new transmitter site which is short-spaced to an FM station other than another Class A station which is seeking a mutual increase in facilities may be granted only if no alternative fully-spaced site or less short-spaced site is available. Licensees of Class A stations seeking mutual increases in facilities need not show that a fully spaced site or less short-spaced site is available. Applications submitted pursuant to the provisions of this paragraph may be granted

## § 73.215

only if such action is consistent with the public interest.

[52 FR 37789, Oct. 9, 1987, as amended at 54 FR 14964, Apr. 14, 1989; 54 FR 35339, Aug. 25, 1989; 56 FR 27426, June 14, 1991; 62 FR 50521, Sept. 26, 1997; 63 FR 33876, June 22, 1998]

## §73.215 Contour protection for shortspaced assignments.

The Commission will accept applications that specify short-spaced antenna locations (locations that do not meet the domestic co-channel and adjacent channel minimum distance separation requirements of §73.207); Provided That, such applications propose contour protection, as defined in paragraph (a) of this section, with all shortspaced assignments, applications and allotments, and meet the other applicable requirements of this section. Each application to be processed pursuant to this section must specifically request such processing on its face, and must include the necessary exhibit to demonstrate that the requisite contour protection will be provided. Such applications may be granted when the Commission determines that such action would serve the public interest, convenience, and necessity.

(a) Contour protection. Contour protection, for the purpose of this section, means that on the same channel and on the first, second and third adjacent channels, the predicted interfering contours of the proposed station do not overlap the predicted protected contours of other short-spaced assignments, applications and allotments, and the predicted interfering contours of other short-spaced assignments, applications and allotments do not overlap the predicted protected contour of the proposed station.

(1) The protected contours, for the purpose of this section, are defined as follows. For all Class B and B1 stations on Channels 221 through 300 inclusive, the F(50,50) field strengths along the protected contours are 0.5 mV/m (54 dB $\mu$ ) and 0.7 mV/m (57 dB $\mu$ ), respectively. For all other stations, the F(50,50) field strength along the protected contour is 1.0 mV/m (60 dB $\mu$ ).

(2) The interfering contours, for the purpose of this section, are defined as follows. For co-channel stations, the F(50,10) field strength along the interfering contour is 20 dB lower than the F(50,50) field strength along the protected contour for which overlap is prohibited. For first adjacent channel stations ( $\pm 200$  kHz), the F(50,10) field strength along the interfering contour is 6 dB lower than the F(50,50) field strength along the protected contour for which overlap is prohibited. For both second and third adjacent channel stations ( $\pm 400$  kHz and  $\pm 600$  kHz), the F(50,10) field strength along the interfering contour is 40 dB higher than the F(50,50) field strength along the protected contour for which overlap is prohibited.

(3) The locations of the protected and interfering contours of the proposed station and the other short-spaced assignments, applications and allotments must be determined in accordance with the procedures of paragraphs (c), (d)(2) and (d)(3) of §73.313, using data for as many radials as necessary to accurately locate the contours.

(4) Protected and interfering contours (in dBu) for stations in Puerto Rico and the U.S. Virgin Islands are as follows:

Station with interfering contour	Station with protected contour							
	Class A		Class B1		Class B			
	Interfering	Protected	Interfering	Protected	Interfering	Protected		
Co-Channel:								
Class A	46	66	41	61	40	60		
Class B1	43	63	39	59	38	58		
Class B	45	65	41	61	41	61		
1st Adj. Channel:								
Class A	61	67	56	62	59	65		
Class B1	57	63	54	60	54	60		
Class B	62	68	56	62	57	63		
2nd-3rd Adj. Channel:								
Class A	107	67	100	60	104	64		
Class B1	99	59	100	60	104	64		